SILICON NANOPARTICLES
EMBEDDED IN POLYMER MATRIX

ABSTRACT OF THE DISCLOSURE

An organic polymer is used to disperse nanoparticles, such as silicon

5   nanoparticles. The polymer matrix separates the silicon nanoparticles from each

other, thus preventing them from aggregating to form clusters. The resulting silicon

nanoparticles can then photoluminescence at the desired wavelengths. Such a

polymer matrix with evenly dispersed silicon nanoparticles can also be used within a

solar cell to increase the efficiency of such solar cell.

10